

## ABSTRACT

A microprocessor includes multiple register files. In a single thread mode, the microprocessor allows a single thread to have access to multiple ones of the register  
5 files. In a multi-thread mode, each thread has access to respective ones of the register files. In the multi-thread mode, multiple threads are simultaneously executing. Circuitry and hardware are provided to facilitate the respective modes and to facilitate transitions between the modes.

Approved for Release